

Abstract

This invention relates generally to the field of moiety or molecule analysis, isolation, detection and manipulation and library synthesis. In particular, the invention provides a microdevice, which microdevice comprises: a) a substrate; and b) a photorecognizable coding pattern on said substrate. Preferably, the microdevice does not comprise an anodized metal surface layer. Methods and kits for isolating, detecting and manipulating moieties, and synthesizing libraries using the microdevices are also provided. The invention further provides two-dimensional optical encoders and uses thereof.